

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION
IRRIGATION CANAL OR LATERAL
CODE 320**

1. SITE PREPARATION

The foundation area for all canal and lateral embankments shall be cleared of all trees, brush, weeds, sod, loose rock, or other materials not suitable for the subgrade.

(c) Tracked-equipment (crawler) may be used provided it is routed so the entire surface area of each lift is traversed by not less than four passes of the tracks.

2. EARTHWORK

a. Earthfill. Earthfill embankments shall be constructed to the neat lines and grades shown on the plans and established at the field locations.

- (1) All embankment material shall come from channel excavations or other borrow areas as specified on the plans or approved at the site by the responsible technician. Fill material shall be free of brush, roots, sod, large rocks, or other material not suitable for making compacted fills.
- (2) The fill material shall contain sufficient moisture that when a small portion is taken in the hand and squeezed, it remains intact when released.
- (3) Fill material shall be placed in horizontal lifts not exceeding eight inches before compaction. Each lift shall be compacted before placing material for the next lift.
- (4) Compaction shall be acceptable when one of the following conditions is met:
 - (a) Two complete passes are made over the entire surface area of each lift with a pneumatic or sheepsfoot roller.
 - (b) Three complete passes are made over the entire surface area of each lift with heavily loaded rubber-tired scrapers.

b. Excavation. Excavation shall be to the neat lines and grades shown on the plans and established at the field location. Excavated materials shall be used in designated fill locations for compacted earth embankment or wasted to prescribed waste locations. Excavation in borrow areas shall be at locations prescribed and to lines and grades established in the field.

3. TOLERANCES

All construction shall be completed to design lines, grades and elevations within the following tolerances:

- a. Channel bottom grade shall not vary more than 0.2 foot above design grade and not more than 0.5 foot below grade.
- b. Elevations of the embankments shall vary not more than 0.2 foot below design grade and not more than 0.5 foot above design grade.
- c. All constructed cross sectional dimensions shall meet or exceed the design cross section.

4. MEASUREMENT

Completed volumes shall be the computed volumes within the neat lines of design as shown on the drawings or established in the field unless a modification of the design has been authorized in a written change order signed and dated by the technician authorizing such modification.